DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020072 Address: 333 Burma Road **Date Inspected:** 30-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Oui Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008307

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 14W. The weld designations reviewed are as follows:

- 1. SEG3019A-001
- 2. SA7038C-228, 239

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3020D-052 located on Floor Beam to Bottom Plate of OBG Segment 14W. ZPMC Welders are identified as 066038. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G (2F) – FCM – Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2734-R1.

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SMAW repair welding of weld joint SEG3020E-056 located on Floor Beam to Bottom Plate of OBG Segment 14W. ZPMC Welders are identified as 066398. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G (2F) – FCM – Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2734-R1.

SMAW welding of weld joint DP3169-001-158 located on Deck Panel of OBG Segment 14W. ZPMC Welder is identified as 037779. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3169-001-216 located on Deck Panel of OBG Segment 14W. ZPMC Welder is identified as 069493. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

FCAW welding of weld joint DP3170-001-356 located on Deck Panel of OBG Segment 14W. ZPMC Welder is identified as 067520. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

Flux Core Arc Welding (FCAW) welding of weld joint DP3171-001-302 located on Deck Panel of OBG Segment 14W. ZPMC Welder is identified as 067572. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

SMAW welding of weld joint SEG3020J-079 to 082 located on Floor Beam to Floor Beam at panel point 127.5 of OBG Segment 14W. ZPMC Welder is identified as 067775. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114(2)-FCM.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020J-078 located on Floor Beam to Floor Beam at panel point 127.5 of OBG Segment 14W. ZPMC Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

SMAW welding of weld joint SEG3020K-035 located on Longitudinal Diaphragm to Sub Assembly at panel point 127.5 of OBG Segment 14W. ZPMC Welder is identified as 067775. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM.

FCAW welding of weld joint SEG3013P-149 located on Side Plate Stiffener to Floor Beam of OBG Segment 13AW. ZPMC Welder is identified as 067876. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

SMAW welding of weld joint SEG3013P-197 located on Side Plate Stiffener to Floor Beam of OBG Segment 13AW. ZPMC Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

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SMAW welding of weld joint SEG3020AL-003 located on Side plate to Floor Beam OBG Segment 14W. ZPMC Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G (4F) – FCM – Repair, which is used as per Welding Repair Report (WRR) B-WRR-18585. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer